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(पहला पुनरीक्षण)

Indian Standard

COFFEE AND COFFEE PRODUCTS — VOCABULARY

(First Revision)

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BUREAU OF INDIAN STANDARDS

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG

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Price Group 3

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Stimulant Foods Sectional Committee had been approved by the Food and Agriculture Division Council.

This standard was formulated in order to achieve uniformity in the use of terms and their precise interpretation, especially in trade, both at the national and international levels. The terms in this glossary have been classified under three categories, namely, coffee, green coffee and process descriptions.

This standard was first published in 1974. In this revision, the terminology has been aligned with the ISO Standard on the subject, ISO 3509 : 2005 'Coffee and coffee products — Vocabulary'. At the same time certain varieties of coffee which are used in India have been included and certain terms have been modified to make them relevant in the Indian context.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

COFFEE AND COFFEE PRODUCTS — VOCABULARY

(First Revision)

1 SCOPE

This standard defines the most commonly used terms relating to coffee and its products.

2 GENERAL TERMS FOR COFFEE

2.1 Coffee

Fruits and seeds of plants of the genus *Coffea*, usually of the cultivated species and the products from these fruits and seeds, in different stages of processing and use, intended for human consumption.

NOTE — This term applies to products such as cherry coffee, parchment coffee, green coffee, polished coffee, decaffeinated coffee, roasted coffee as beans or ground, coffee extract, instant coffee and coffee brew.

2.2 Normal Coffee

Homogeneous lot of coffee seeds, excluding the six categories of materials defined as ‘defects’, namely:

- a) Foreign materials of non-coffee origin;
- b) Foreign materials of non-bean origin;
- c) Irregularly formed beans;
- d) Beans of irregular visual appearance;
- e) Insect damaged beans; and
- f) Off-taste coffees.

NOTE — This definition of a sound coffee was developed with the ultimate goal of producing a coffee beverage cup that meets with consumers’ satisfaction and is in agreement with good trade practice.

2.2.1 Arabica Coffee

Coffee of the botanical species *Coffea arabica* L.

NOTE — For example, varieties of *arabica* coffees are:

- a) *Bourbon* — Coffee of the botanical species *Coffea arabica* L., traditional varieties in East Africa and Brazil;
- b) *Typica* — Coffee of the botanical species *Coffea arabica* L., selected varieties in Indonesia and mainly cultivated varieties in Central and South America [also called Arabica (Brazil), Blue Mountain (Jamaica)];
- c) *Mundo Novo* — Coffee of the botanical species *Coffea arabica* L., derived from a cross between Bourbon and Typica;
- d) *Mokka* — Coffee of the botanical species *Coffea arabica* L., not much cultivated;
- e) *Caturra* — Coffee of the botanical species *Coffea arabica* L. mutant variety (dwarf) from Bourbon;
- f) *Timor Hybrid* — Coffee of the botanical species *Coffea arabica* L. derived from natural inter-specific

hybridization between *C. canephora* and *C. arabica*, found in East Timor;

- g) *Catimor* — Coffee of the botanical species *Coffea arabica* L., derived from cross between Caturra and Timor Hybrid;
- h) *Catuai* — Coffee of the botanical species *Coffea arabica* L., resulting from cross between Mundo Novo and Caturra, selected in Brazil;
- j) *Icatu* — Coffee of the botanical species *Coffea arabica* L., derived from hybridization with *C. canephora* and backcross to *C. arabica*;
- k) *Colombia* — Coffee of the botanical species *Coffea arabica* L., Catimor type selected in Colombia;
- m) *CR95* — Coffee of the botanical species *Coffea arabica* L., Catimor type selected in Costa Rica;
- n) *Ruiru II* — Coffee of the botanical species *Coffea arabica* L., resulting from cross between *C. arabica* and Catimor (CBD resistant coffee);
- p) *S.795 (Sln.3)* — A hybrid derived from the cross between a natural hybrid of *C. arabica* and *C. liberica* and Kents variety;
- q) *Devamachy hybrids (Sln.5A and Sln.5B)* — Coffee of the botanical species *Coffea arabica* L. derived from a cross between a spontaneous hybrid of *C. arabica* and *C. canephora* and Rume Sudan (Sln.5A) and Doobla hybrid (Sln.5B) respectively;
- r) *Sln.6.* — Coffee of the botanical species *Coffea arabica* L. derived from a cross between robusta cv.S.274 and arabica selection Kents through back cross breeding; and
- s) *Sln. 9* — Coffee of the botanical species of *Coffea arabica* L. derived from a cross of a natural hybrid from Timor and Ethiopian arabica Tafariakela.

2.2.2 Robusta Coffee

Coffee of the botanical species *Coffea canephora* Pierre ex A. Froehner, with some varieties and cultivars of these species.

NOTES

1 For example, varieties of Robusta coffees are:

- a) *S. 274 (Sln.1R)* — Coffee of the botanical species *Coffea canephora* Pierre ex Froehner selected for high yield and bold beans.
- b) *CXR* — Coffee of botanical species *Coffea canephora* Pierre ex Froehner robusta variety derived from an interspecific cross involving *C. congensis* and *C.canephora*

2 Conillon is coffee of the botanical species *Coffea canephora* Pierre ex A. Froehner, Kouillou or Kouilou variety, cultivated in Brazil and Madagascar.

2.2.3 Liberica Coffee

Coffee of the botanical species *Coffea liberica* Hiern.

NOTE — The volume of international transactions for this coffee is not significant.

2.2.4 *Excelsa* Coffee

Coffee of the botanical species *Coffea dewevrei* De Wild and Durand var. *excelsa* Chevalier.

NOTE — The volume of international transactions for this coffee is not significant.

2.2.5 *Arabusta* Coffee

Hybrid interspecific coffee *Coffea arabica* × *Coffea canephora* Capot and Ake Assi.

2.2.6 *Monsooned Malabar Coffee*

It is prepared from both whole Arabica and Robusta cherries by monsooning in the Malabar region of Indian peninsula.

3 COFFEE-RELATED MATERIALS

3.1 Coffee Berries

Fruits on the *Coffea* plants.

3.2 Cherry Coffee

Aggregate of dried cherries (fruits) of *Coffea* plants after harvesting.

3.3 Husk Coffee/Coffee in Pod

Dried cherry coffee.

3.4 Parchment Coffee/Coffee in Parchment

Coffee beans wrapped in the endocarp (parchment).

3.5 Green Coffee/Raw Coffee/Coffee Beans

Dried coffee beans without endocarp.

NOTE — So-called green coffee is not necessarily green in colour.

3.6 Wet-Processed Coffee

Green coffee prepared by wet processing of the fruit (see 8.3).

3.6.1 *Washed Coffee*

Wet processed coffee where the mucilage is removed.

3.6.2 *Semi-Washed Coffee*

Wet processed coffee where the mucilage remains adherent to the dried parchment.

3.7 Mild Coffee

Washed arabica coffee

3.8 Dry-Processed Coffee

Green coffee prepared by dry processing of the fruit (see 8.2).

NOTE — The term 'natural coffee' is also used for this product.

3.9 Polished Coffee

Green coffee from which the silver skin has been removed by a mechanical operation to give a gloss and a better appearance.

3.10 Washed-and-Cleaned Coffee

Coffee beans prepared by wet processing and silverskin is removed by mechanical means after drying.

3.11 Triage Residue/Screenings

Foreign matter, other impurities originating in the cherry and defective beans separated by sorting.

3.12 Roasted Coffee

Product obtained by roasting green coffee.

3.13 Ground Coffee/R&G Coffee

Product obtained by grinding roasted coffee.

3.14 Coffee Extract

Product obtained exclusively from roasted coffee by physical methods, using water as the only carrying agent that is not derived from coffee.

3.15 Instant Coffee/Soluble Coffee/Dried Coffee Extract

Dried, water-soluble product, obtained exclusively from roasted coffee by physical methods using water as the only carrying agent that is not derived from coffee.

3.15.1 *Spray-Dried Instant Coffee*

Instant coffee obtained by a process in which the coffee extract in the liquid state is sprayed into a hot atmosphere to form dried particles by evaporation of the water.

3.15.2 *Agglomerated Instant Coffee*

Instant coffee obtained by a process in which the spray-dried particles of instant coffee are fused together to form larger particles.

3.15.3 *Freeze-Dried Instant Coffee/Freeze-Dried Coffee Extract/Freeze-Dried Coffee/Freeze-Dried Soluble Coffee*

Instant coffee obtained by a process in which the product in the liquid state is frozen and the ice is removed by sublimation.

3.16 Decaffeinated Coffee

Coffee from which caffeine has been removed by extraction.

3.17 Coffee Brew

Beverage obtained either by treatment of ground

roasted coffee with water, or by the addition of water to a coffee extract or an instant coffee.

4 PARTS OF THE COFFEE FRUIT (UNDRIED)

4.1 Coffee Cherry

Fresh, complete fruit of the coffee tree.

4.2 Pulp

Part of the coffee cherry composed of the external exocarp and most of the internal mesocarp (mucilaginous tissue).

NOTE — Pulp is eliminated during the pulping and fermentation processes (see 8.3.1).

4.3 Parchment

Endocarp of the coffee fruit.

4.4 Bean/Fresh Bean

Endosperm (seed) of the coffee fruit.

NOTE — There are generally two beans per fruit.

5 PARTS OF THE COFFEE FRUIT (DRIED)

5.1 Dried Coffee Cherry/Coco

Dried fruit of the coffee tree, comprising its external envelopes and one or more beans.

5.2 Husk/Dried Cherry Pulp

Assembled external envelopes (pericarp) of the dried coffee fruit.

5.3 Bean in Parchment

Coffee bean entirely or partially enclosed in its parchment (endocarp).

5.4 Hull/Dried Parchment

Dried endocarp of the coffee fruit.

5.5 Silverskin/Dried Testa/Dried Seed Perisperm

Coat of the coffee bean.

NOTE — It has generally a silvery or coppery appearance.

5.6 Coffee Bean

Commercial term designating the dried seed of the coffee plant.

6 GREEN COFFEE

6.1 Geometrical Characteristics

6.1.1 Bean Diameter

Diameter of the smallest circular hole through which the coffee bean can pass.

NOTES

1 It applies usually to holes in the sieves used for bean size classification.

2 Specific definitions may apply for the classification of peaberry beans (see 6.1.3).

6.1.2 Flat Bean

Coffee bean with one perceptibly flat face.

6.1.3 Peaberry Bean/Caracolito

Coffee bean of nearly ovaloid form, resulting from the development of a single seed in the fruit.

6.1.4 Elephant Bean/Elephant

Assembly of beans (usually two, sometimes more) resulting from false polyembryony (see 6.4.3).

6.2 Foreign Matter

6.2.1 Foreign Matter

Mineral, animal or vegetal matter not originating in the coffee cherry.

6.2.2 Stone

Stone of any size.

6.2.3 Stick

Twig of any size.

6.2.4 Clod

Granulated lump of aggregated soil particles.

6.2.5 Metallic Matter

Metallic particles of any size.

NOTE — These can be particles found after drying the coffee in the drying area and/or after degradation of industrial equipment in contact with the coffee.

6.2.6 Animal Matter

Particles of any size comprising impurities of animal origin, such as dead insects, fragments or remains of insects, faeces and urine of animals.

NOTE — These can be particles found after drying the coffee in the drying area.

6.2.7 Other Foreign Matter

Particles of any size not originating from the coffee process.

Examples: Cigarette stumps, plastic particles, bag particles, strings, glass, mineral particles and other types of bean such as corn, wheat, etc.

6.3 Defects Originating from the Coffee Fruit

6.3.1 Dried Cherry

Dried fruit (pod) of the coffee tree, comprising its external envelopes and one or more beans.

6.3.2 Husk Fragment

Fragment of the dried external envelope of the cherry (pericarp).

6.3.3 Bean in Parchment

Coffee bean entirely or partially enclosed in its parchment (endocarp).

6.3.4 Piece of Parchment

Fragment of the dried parchment (endocarp).

6.4 Irregularly Formed Beans

6.4.1 Malformed Bean

Coffee bean whose abnormal shape makes it clearly distinguishable.

6.4.2 Shell Bean/Shell

Malformed bean whose abnormally shaped shell, presenting a cavity, makes it clearly distinguishable.

NOTE — Shell beans are usually found with ear beans (see 6.4.3). Both originate from the splitting of an elephant bean (see 6.1.4).

6.4.3 Ear Bean/Shell Core

Malformed bean whose peculiar crumpled abnormal shape makes it clearly distinguishable.

NOTE — Ear beans are usually found with shell beans (see 6.4.2). Both originate from the splitting of an elephant bean (see 6.1.4).

6.4.4 Bean Fragment

Fragment of a coffee bean, of volume less than half a bean.

6.4.5 Broken Bean

Fragment of a coffee bean, of volume equal to or larger than half a bean.

6.4.6 Pulper-Nipped Bean/Pulper-Cut Bean

Wet-processed coffee bean that has been cut or bruised during pulping, often with brown or blackish marks.

6.4.7 Insect-Damaged Bean

Coffee bean damaged internally or externally by insect attack.

NOTE — The term 'fève scolytée' or 'broca' is used in French for an insect-damaged bean when the attack is due to *Hypothenemus hampei* Ferr.

6.4.8 Insect-Infested Bean

Coffee bean harbouring one or more insects at any stage of development.

6.4.9 Live-Insect-Infested Bean

Coffee bean harbouring one or more live insects at any stage of development.

6.4.10 Dead-Insect-Infested Bean

Coffee bean containing one or more dead insects or insect fragments.

6.5 Beans of Irregular Visual Appearance

6.5.1 Black Bean

Coffee bean of which more than one-half of the external surface and interior is black (endosperm).

6.5.2 Partly Black Bean

Coffee bean of which half or less than one-half of the external surface and interior is black (endosperm).

NOTE — The term 'semi-black bean' is often used.

6.5.3 Black-Green Bean

Unripe coffee bean, often with a wrinkled surface, with a dark green almost black colour and a glossy silverskin.

6.5.4 Immature Bean/Guaker Bean

Unripe coffee bean, often with a wrinkled surface.

NOTES

1 Such beans have a greenish or metallic green silverskin colour. Cell walls and internal structure are not fully developed.

2 After roasting, immature beans are of a lighter brown colour than normal mature beans.

6.5.5 Brown Bean/Ardido

Coffee bean having a range of colours, such as very light reddish brown, brown-black, yellowish green to dark reddish brown and a dark brown internal colour (endosperm).

NOTES

1 When roasted and infused, such beans produce an unpleasant sour taste (stinker).

2 Such beans are not to be confused with the foxy silverskin beans (see 6.5.6), which have a normal green internal colour revealed by gentle scratching of the surface, and which produce no off-flavour in the cup.

6.5.6 Foxy Silverskin Bean/Melado

Coffee bean with a coloured silverskin (perisperm), ranging from yellowish pink to dark reddish brown.

NOTES

1 After removal of the silverskin, no unusual shade remains on the naked bean.

2 Such beans are not to be confused with brown beans (see 6.5.5).

6.5.7 Dark Brown Bean

Coffee bean with a wrinkled appearance and a complete dark brown colour, due to attack by *Antestia* bugs or blight on the cherry whilst immature.

NOTE — This defect can also be caused by over-ripe berries and faulty pulping.

6.5.8 Waxy Bean

Coffee bean with translucent waxy appearance, usually ranging in colour from yellowish green to dark reddish brown.

NOTE — The cell and surface have a decayed fibrous appearance.

6.5.9 Amber Bean

Coffee bean with yellow amber colour, usually semi-transparent, due to a nutrient deficiency in the soil.

6.5.10 White Bean

Coffee bean with a whitish colour, ranging from pale green to light ivory, sometimes with a variegated pattern.

NOTE — This defect can also be caused by rewetting after drying.

6.5.11 Blotchy Bean/Spotted Bean

Coffee bean showing irregular greenish, whitish or sometimes yellow patches.

6.5.12 Withered Bean

Coffee bean that is wrinkled and light in mass.

6.5.13 Spongy Bean

Coffee bean of consistency analogous to that of cork and generally whitish in colour.

NOTE — The tissues may be indented by pressure of the fingernail.

6.5.14 White Low-Density Bean/Floater Bean

Coffee bean that is white in colour and very light in mass, with a density well below that of a healthy bean.

6.5.15 Mouldy Bean

Coffee bean showing mould growth or evidence of attack by mould visible to the naked eye.

6.6 Off-Taste Coffees**6.6.1 Sour Bean/Fermented Bean**

Coffee bean deteriorated by excess fermentation, with a range of colours from light brown to dark brown internally (endosperm) and a waxy aspect, producing a sour taste when roasted and infused.

6.6.2 Stinker Bean

Coffee bean giving off a very unpleasant odour on being freshly cut and giving a very unpleasant flavour in the cup, like fermented, sour or rotten fish.

NOTE — The bean may be light brown or brownish, or have occasionally a waxy appearance, or even present a normal appearance.

6.6.3 Dirty Bean/Untidy Bean

Coffee bean imparting an unpleasant musty, foul, dirty,

earthy, woody, Rioy, phenolic or jute-bag-like flavour to the cup.

7 ROASTED COFFEE**7.1 Carbonized Bean**

Blackish roasted coffee bean, of texture analogous to that of charcoal, easily crushed into fine particles by finger pressure.

7.2 Blotchy Bean/Spotted Bean

Roasted coffee bean showing irregular colour patches.

7.3 Pale Bean

Roasted coffee bean having a colour substantially lighter than that of the other roasted beans.

7.4 Vile-Smelling Bean

Roasted coffee bean that gives off an unpleasant odour, usually resulting from a stinker bean (*see* 6.6.2) or sour bean (*see* 6.6.1).

8 PROCESSES**8.1 Selection**

Technological operation intended to eliminate foreign matter (for example stones, twigs, leaves) and to sort coffee cherries according to size, density and degree of maturity.

8.2 Dry Process

Treatment of coffee cherries consisting in drying them, either under sunlight or in drying machines, to give husk coffee (*see* 3.3).

NOTE — This is usually followed by mechanical removal of the dried pericarp (husk) to produce 'natural' green coffee (*see* 3.8).

8.2.1 Drying of Cherry Coffee

Technological operation intended to reduce the moisture content of the coffee cherries in order to allow their dehusking and good keeping.

8.2.2 Dehusking

Mechanical removal of the husks (pericarp) from dry coffee cherries.

8.3 Wet Process

Treatment of coffee cherries consisting of the mechanical removal of the exocarp (pulp) in the presence of water, alternatively followed by either removal of the mucilage (mesocarp) by fermentation or other methods, followed by washing to give parchment coffee, or direct drying of the pulped beans within their mucilaginous parchment, followed by hulling to produce 'semi-washed' green coffee.

NOTE — Removal of the mucilage is usually followed by drying and hulling to produce 'washed green coffee' (see 3.6).

8.3.1 Pulping

Technological operation used in the wet process to remove the pulp (exocarp) and as much as possible of the mucilage (mesocarp) by mechanical means.

NOTE — A portion of the mucilaginous mesocarp usually remains adhering to the parchment (endocarp).

8.3.2 Fermentation Process

Treatment intended to digest the mucilaginous mesocarp adhering to the parchment of the pulped coffee, allowing its elimination by washing.

NOTE — The fermentation process can be replaced by a mechanical demucilaging system to remove the mucilage by friction.

8.3.3 Washing

Technological operation intended to remove by water all traces of the mucilaginous mesocarp from the surface of the parchment.

8.3.4 Drying of Parchment Coffee

Technological operation intended to reduce the moisture content of parchment coffee to a level that allows hulling under satisfactory technical conditions and that will not be detrimental to further storage of the coffee.

8.3.5 Hulling

Removal of the dried endocarp of parchment coffee to produce green coffee.

8.4 Polishing

Technological operation to remove the residual silverskin (perisperm) from green coffee by purely mechanical means.

NOTE — Polishing can be executed after rewetting the green coffee.

8.5 Sorting

Technological operation intended to remove foreign matter, fragments of coffee and defective beans from green coffee.

8.6 Roasting

Heat treatment that produces fundamental chemical and physical changes in the structure and composition of green coffee, bringing about darkening of the beans and the development of the characteristic flavour of roasted coffee.

8.7 Grinding

Mechanical operation intended to produce fragmentation of roasted coffee beans, resulting in ground coffee.

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BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones : 2323 0131, 2323 3375, 2323 9402

Website: www.bis.org.in

Regional Offices:

Telephones

Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg
NEW DELHI 110002

{ 2323 7617
2323 3841

Eastern : 1/14 C.I.T. Scheme VII M, V. I. P. Road, Kankurgachi
KOLKATA 700054

{ 2337 8499, 2337 8561
2337 8626, 2337 9120

Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022

{ 260 3843
260 9285

Southern : C.I.T. Campus, IV Cross Road, CHENNAI 600113

{ 2254 1216, 2254 1442
2254 2519, 2254 2315

Western : Manakalaya, E9 MIDC, Marol, Andheri (East)
MUMBAI 400093

{ 2832 9295, 2832 7858
2832 7891, 2832 7892

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